

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006390**Date Inspected:** 06-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

Bay 3-

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Floor Beams, FB016-034, FB012-026, FB019-023 and FB011-027(A side). The weld identification numbers are as follows, FB016-034-017, 018, 020, 033, 046, FB009-023-003, 015, 016, 020, 024, 025, FB011-027-015, 016, 020, 025.

Floor Beam FB012-026 did not pass QA visual inspection prior to MT testing. A 10 mm longitudinal indication was found on weld 009. Magnetic Particle testing was performed on the indication. ZPMC personnel tried to remove the indication with light grinding. Indication was still present after grinding. ZPMC QC Chen Xi stated that the indication would be removed and Magnetic Particle Testing would be performed after removal of the indication and after welding if welding was required.

OBG Outside (west of bay 19)-

This QA Inspector performed Phased Array Ultrasonic Testing (PAUT) of OBG deck panel u-rib Partial Joint Penetration (PJP) welds at tack weld locations. Caltrans NDT personnel performed conventional ultrasonic testing of tack welds. Tack weld locations that exhibited crack like indications in the area of interest were marked and recorded prior to PAUT. PAUT was performed in accordance with Caltrans UT procedure " Phased Array Testing for detection of planar discontinuities (cracks) in PJP welds. Results of Deck Panels evaluated are as

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follows:

DP470-001 (8AE): 23 locations tested with 9 locations rejected.

DP416-001 (8AE): 43 locations tested 35 locations rejected.

Bay 1-

QA Inspector observed the following work in progress: FCAW welding of weld joint 019 through 024 located on Cross Beam 1 Deck Plate DP521-001 . ZPMC welder was identified as 0219188. ZPMC QC is identified as Chen Xi. The welding appeared to be in conformance with welding procedure specification, WPS-B-T-2233-B-U2-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150 0042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
